Case 5:14-cv-05344-BLF Document 760 Filed 01/17/17

Page 1 of 33

TABLE OF CONTENTS

NOT	ICE OI	F MOTION			
MEN	MORANDUM OF POINTS AND AUTHORITIES1				
I.	INTI	NTRODUCTION			
II.	FAC	TUAL BACKGROUND			
	A.	Cisco's asserted CLI elements are a small portion of its command-line interface, a functional system used to manage networking devices.			
	B.	Cisco borrowed from pre-existing CLI systems and established industry terminology and standards, and failed to prove original authorship			
	C.	Cisco's CLI elements reflect functions, not original creative expression			
	D.	Cisco knew and accepted for years that the industry (including Arista) was using its CLI as a model			
		Cisco only claimed copyright in CLI elements after Arista's transformative innovations left Cisco behind			
	F.	Cisco failed to compete with Arista's transformative products on their technical merits, not because of the CLI			
SUCCEED—AS A MATTER OF LAW A. Cisco lacks sufficient evidence that it owns any protectal		CO'S COPYRIGHT CLAIMS FAIL—AND ARISTA'S DEFENSES CEED—AS A MATTER OF LAW			
		Cisco lacks sufficient evidence that it owns any protectable original expression in the asserted CLI.			
		1. Cisco lacks adequate proof of original authorship12			
		2. Cisco's asserted CLI elements are unprotectable under Section 102(b)			
		3. Cisco has failed to prove any of its asserted CLI elements or combinations thereof are protectable creative expression			
		4. Command "names" and help strings are unprotectable short phrases			
	B.	Cisco has not proven any protectable compilation of CLI elements			
	C.	No reasonable jury could find Cisco has proven infringement given the "thin" protection that applies to Cisco's works.			
		1. Cisco has failed to show "virtual identity" of the works as a whole (omitting unprotectable elements) as needed to prove illicit copying			

Page

1			TABLE OF CONTENTS (continued)		
2			(33.14.14.04)	Dogg	
3				Page	
4			2. Cisco lacks sufficient evidence to prove infringement even under the substantial identity test for works receiving broad protection	18	
5		D.	The jury lacked sufficient evidence to consider and compare the disputed works as a whole—or even to define their scope.	18	
6 7		E.	No substantial evidence proves Cisco's "user interfaces" are copyrighted works separate from Cisco's complete registered operating systems	19	
8		F.	Arista's conduct is fair use as a matter of law	20	
9		G.	Cisco abandoned its copyrights as a matter of law.	23	
10		H.	Cisco has misused its copyrights as a matter of law	24	
11		I.	No reasonable jury could fail to find merger on this record.	25	
12	IV.		THE SAME REASONS, ANY NEW TRIAL MUST INCLUDE ALL	25	
13	ISSUES				
14	V.	CONCLUSION			
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

ii

26

27

TABLE OF AUTHORITIES

2	Page(s)
3	<u>Federal Cases</u>
4	Alberto-Culver Co. v. Andrea Dumon, Inc. 466 F.2d 705 (7th Cir. 1972)
5 6	Allen v. Academic Games League of America, Inc. 89 F.3d 614 (9th Cir. 1996)
7	Altera Corp. v. Clear Logic, Inc. 424 F.3d 1079 (9th Cir. 2005)
8 9	Antonick v. Elec. Arts, Inc. 841 F.3d 1062 (9th Cir. 2016)
10	Apple Computer, Inc. v. Microsoft Corp. 35 F.3d 1435 (9th Cir. 1994) 17, 18, 19
11 12	Apple Inc. v. Pystar Corp 658 F.3d 1150 (9th Cir. 2011)
13	Ashton-Tate Corp. v. Ross 916 F.2d 516 (9th Cir. 1990)
14 15	Baker v. Selden 101 U.S. 99 (1879)13
16	Bikram's Yoga College of India v. Evolation Yoga 803 F.3d 1032 (9th Cir. 2015)
17 18	Blanch v. Koons 467 F.3d 244 (2d Cir. 2006)
19	Campbell v. Acuff-Rose Music, Inc. 510 U.S. 569 (1994)
20 21	Capitol Records, Inc. v. Naxos of Am., Inc. 372 F.3d 471 (2d Cir. 2004)
22	CMM Cable Rep, Inc. v. Ocean Coast Properties, Inc. 97 F.3d 1504 (1st Cir. 1996)
23	Data East USA v. Epyx Inc.
24	862 F.2d 204 (9th Cir. 1988)
25	DC Comics v. Towle 802 F.3d 1012 (9th Cir. 2015)
2627	Dream Games of Arizona, Inc. v. PC Onsite 561 F.3d 983 (9th Cir. 2009)
28	Eng'g Dynamics, Inc. v. Structural Software, Inc. 26 F.3d 1335 (5th Cir. 1994)
	ARISTA'S IMOLAND CONDITIONAL MOTION FOR NEW TRIAL

TABLE OF AUTHORITIES (continued)

2	(continued)
2	Page(s)
3 4	Ets-Hokin v. Skyy Spirits, Inc. 225 F.3d 1068 (9th Cir. 2000)
5	Ets-Hokin v. Skyy Spirits, Inc. 323 F.3d 763 (9th Cir. 2003)
6 7	Feist Publications, Inc. v. Rural Tel. Serv. Co. 499 U.S. 340 (1991)
8	Greene v. Ablon 914 F. Supp. 2d 110 (D. Mass. 2012), aff'd, 794 F.3d 133 (1st Cir. 2015)
9 10	Hampton v. Paramount Pictures Corp. 279 F.2d 100 (9th Cir. 1960)23
11	Harper & Row, Publishers, Inc. v. Nation Enters. 471 U.S. 539 (1985)
12 13	Herbert Rosenthal Jewelry Corp. v. Kalpakian 446 F.2d 738 (9th Cir. 1971)
14	Hustler Magazine Inc. v. Moral Majority Inc. 796 F.2d 1148 (9th Cir. 1986)21
15 16	Hutchins v. Zoll Med. Corp. 492 F.3d 1377 (Fed. Cir. 2007)
17	Johnson v. Paradise Valley Unified Sch. Dist. 251 F.3d 1222 (9th Cir. 2001)
18 19	Kelly v. Arriba Soft Corp. 336 F.3d 811 (9th Cir. 2002)
20	L.A. Printex Indus., Inc. v. Aeropostale, Inc. 676 F.3d 841 (9th Cir. 2012)
21 22	Lakeside-Scott v. Multnomah Cty. 556 F.3d 797 (9th Cir. 2009)
23	Landsberg v. Scrabble Crossword Game Players, Inc. 736 F.2d 485 (9th Cir. 1984)
2425	Lies v. Farrell Lines, Inc. 641 F.2d 765 (9th Cir. 1981)
26	Mattel, Inc. v. MGA Entm't, Inc. 616 F.3d 904 (9th Cir. 2010)
27 28	Matthew Bender & Co. v. W. Pub. Co. 158 F.3d 674 (2d Cir. 1998)
	iv

TABLE OF AUTHORITIES (continued)

2	(continuea)
	Page(s)
3 4	MCA, Inc. v. Wilson 677 F.2d 180 (2d Cir. 1981)
5	MiTek Holdings, Inc. v. Arce Engineering Co., Inc. 89 F.3d 1548 (11th Cir. 1996)
6 7	Mitel, Inc. v. Iqtel, Inc. 124 F.3d 1366 (10th Cir. 1997)
8	Monge v. Maya Magazines, Inc. 688 F.3d 1164 (9th Cir. 2012)
9 10	Narell v. Freeman 872 F.2d 907 (9th Cir. 1989)
11	NXIVM Corp. v. Ross Inst. 364 F.3d 471 (2d Cir. 2004)
12 13	Oracle America, Inc. v. Google Inc. 750 F.3d 1339 (Fed. Cir. 2014) (Oracle I)
14	Oracle America, Inc. v. Google, Inc. No. 10-cv-03561-WHA, 2016 WL 3181206 (N.D. Cal. June 8, 2016) (Oracle II) 21, 22
15 16	Pelt v. CBS, Inc. No. CV-92-6532, 1993 WL 659605 (C.D. Cal. Oct. 25, 1993)
17	Peralta v. Dillard 744 F.3d 1076 (9th Cir. 2014) (en banc) 11
18 19	Reeves v. Sanderson Plumbing Prod., Inc. 530 U.S. 133 (2000)
20	Satava v. Lowry 323 F.3d 805 (9th Cir. 2003)
21 22	Sega Enters. Ltd. v. Accolade, Inc. 977 F.2d 1510 (9th Cir. 1992)
23	Silver Sage Partners, Ltd. v. City of Desert Hot Springs 251 F.3d 814 (9th Cir. 2001)
24 25	Sony Computer Entm't Am., Inc. v Bleem, LLC 214 F.3d 1022 (9th Cir. 2000)
26	Stuff v. E. C. Publications, Inc. 342 F.2d 143 (2d Cir. 1965)24
27 28	VMG Salsoul, LLC v. Ciccone 824 F.3d 871 (9th Cir. 2016)

TABLE OF AUTHORITIES (continued) Page(s) Wall Data Inc. v. Los Angeles Cnty. Sheriff's Dept. **Federal Statutes Federal Rules** Fed. Rule of Civ. Proc. 50(a) 1, 12, 19 **Federal Regulations**

NOTICE OF MOTION

Arista moves under Federal Rules of Civil Procedure 50(b) and 59 for judgment as a matter of law or new trial to the extent that the existing Judgment incorporates adverse jury findings. This motion is presented to protect against any potential waiver of Arista's rights to present related arguments on appeal and defend the jury's no liability verdict and resulting final judgment, including Arista's conditional right to a new trial. Accordingly, Arista seeks the following relief: an order entering judgment in Arista's favor as a matter of law as to (1) Cisco's copyright infringement claims (including specifically judgment that Cisco's asserted CLI elements are not protected by copyright and were not infringed) and (2) Arista's defenses of fair use, abandonment, copyright misuse, and merger. This motion is based on this notice and the following memorandum of points and authorities, the trial record in its entirety, and any other evidence and argument that has been and may be presented before the Court decides this motion.

MEMORANDUM OF POINTS AND AUTHORITIES

I. INTRODUCTION

Arista has no quarrel with the December 19, 2016 Judgment to the extent that it dismisses all claims against Arista and decrees that Cisco take nothing. To avoid any potential waiver on appeal, however, Arista files this motion re-asserting the grounds for judgment as a matter of law previously stated in Arista's Rule 50(a) motion (and asserting a conditional right to a new trial under Rule 59) to the extent that the Judgment reflects and incorporates adverse jury findings on copyright issues other than Arista's affirmative defense of *scenes a faire*. ¹

First, the trial record cannot support a verdict that Cisco proved its infringement claim. Cisco lacks substantial evidence that any CLI elements in which it claims copyright (or any compilation(s) thereof) contain original protectable expression. As a matter of law, Cisco also cannot prevail that the asserted user interfaces are copyrighted works separate from Cisco's operating systems. Also, no reasonable jury could find actionable copying given the factual, highly constrained nature of Cisco's works, and the stringent infringement test for such works.

¹ Arista's motion addresses only the sufficiency of the evidence to support the jury's verdict on questions presented to the jury. Arista maintains all of its prior objections to other rulings by the Court and does not intend to waive any rights to present any related arguments on appeal.

Cisco also lacked adequate evidence of the complete works, as Ninth Circuit law requires.

Second, the trial record here—including Cisco's own admissions and uncontroverted third party evidence—compels a finding for Arista on its defenses of fair use, abandonment, copyright misuse, and merger, in addition to the *scenes a faire* defense the jury sustained. All of the fair use factors heavily favor Arista, and Cisco's conduct itself proves that a reasonable copyright owner would have accepted Arista's use given common and accepted industry practice (and did so for many years). The same record evidence compels a finding that Cisco abandoned any copyright interest in its CLI by encouraging the widespread industry use of Cisco's CLI over many years, and that Cisco's attempts to exploit its limited copyrights for broad anticompetitive advantage are copyright misuse. Finally, no reasonable jury could fail to find that Cisco's expression of functions and ideas in Cisco's CLI merged with the ideas themselves.

II. FACTUAL BACKGROUND

A. Cisco's asserted CLI elements are a small portion of its command-line interface, a functional system used to manage networking devices.

Undisputed evidence shows Cisco's asserted "user interface" for each operating system is a functional system or mode of operation by which a user (human or machine) can manage networking equipment. The interface appears to a user as a simple command prompt screen (consisting of a short name and the symbol ">" or "#") at which the user types commands to invoke the desired functions. *See* Tr. (Lougheed) at 501:24-502:5 (explaining operation of CLI by typing in words). Many commands simply change technical configuration parameters of the device being controlled; some trigger a command "output" shown on the screen, which is essentially a blank form for displaying technical status information about the network or a device feature, using formatting that makes the outputs easy for the operating system to understand. *See* Tr. (Remaker) at 678-79. Entering "?" invokes a help system that displays short descriptions of what commands do ("help strings" or "help descriptions"). *See* Tr. (Lougheed) at 525:16-526:4.

This type of "command-line interface"—as opposed to a modern graphical user interface ("GUI")—long predates Cisco. The basic look of Cisco's command-line interface was not

² Citations to "Tr." refer to the trial transcript; "TX __" citations are to exhibits admitted at trial.

16 17

18 19

20 21

22

23

25 26

24

27

28

original to Cisco, and there were no realistic alternatives when Cisco created it. Rather, "[a]ll those machines in that era had CLIs" (Tr. (Lougheed) 589:11-12) because a CLI was "how we did things in those days," while a modern GUI would have required "hardware support that we didn't have and weren't willing to add," and menus were "extremely slow and clunky." Tr. (Lougheed) at 505:3-15; see also Tr. (Remaker) 688:1-2 (Cisco's CLI "looks like DOS from the 1980s").

Cisco's own witnesses described its CLI in functional terms. Ms. Bakan testified that the CLI is "a mechanism by which the administrators . . . have direct access to" manage devices. Tr. (Bakan) 468:13-18; Tr. (Bakan) 486:24-25 (CLI is "the most trustworthy mechanism [to] get information about what's happening on the device"). Commands "communicate what you are wanting" in a "telegraphic style." Tr. (Lougheed) 503:21-504:10 (CLI can expand to add new functions; CLI is "a means of communication"). The CLI has no separate existence or value by itself: Cisco does not sell it separately from the operating systems, and "[i]t's part of the operating system. That is the brain of the hardware." Tr. (Bakan) 475:21-24. Cisco has not evaluated the "value of the CLI separate from the product itself" because it merely "represents all the functionality that's available in the products." Tr. (Bakan) 468:10-14, 475:13-20.

Cisco also admitted that the CLI elements it accused Arista of copying are a small fraction of the features in Cisco's CLI. See Tr. (Bakan) 476:12-15 (not all features); TX 4789 (asserted commands); TX 4799 (help descriptions); TX 4800 (command outputs); Tr. (Black) at 2126:19-2127:18 (no claim that other parts of user interface copied).³

В. Cisco borrowed from pre-existing CLI systems and established industry terminology and standards, and failed to prove original authorship.

Cisco's CLI borrowed from the interfaces of pre-existing operating systems, using conventional commands and other features. Kirk Lougheed, who created the Cisco CLI using

In fact, most of the asserted commands are only partial and will not work without additional parameters; no substantial evidence supports counting them as actual commands. Tr. (Black) at 2131–33; TX 9037. Even taking Cisco's counts at face value, though, Cisco claims unlawful copying of (1) 506 commands from across all four operating systems, out of more than 15,000 commands in IOS alone (Tr. (Kathail) at 1086); (2) four command modes out of more than 100 (Tr. (Almeroth) at 1381:3-18 (over 100 IOS modes); Tr. (Lougheed) at 597 (dozens of modes)); (3) 37 command outputs out of tens of thousands in IOS alone (Tr. (Almeroth) at 1395-96 (not disagreeing re tens of thousands of outputs in IOS); Tr. (Remaker) at 693 (16 responses asserted); and (4) 216 help strings of the thousands included in IOS-XR (Tr. (Almeroth) at 1393:12-19; Tr. (Lougheed) at 600 (IOS "very well could" have tens of thousands of help strings)).

code he took from Stanford without a license, used mode names he knew from prior work with the pre-existing TOPS-20 CLI (Tr. (Lougheed) at 598-99, 604-05), as well as CLI commands (Tr. 583 – "show"; Tr. 589-93 – "terminal length"). Even early on at Cisco, functional customer needs drove the CLI. *See* Tr. (Lougheed) at 513:23-514:9 (Cisco needed to add protocols others used to its own systems and "had to have some way of distinguishing between" them). Lougheed routinely used conventional terms and commands already in use in the industry. Tr. (Lougheed) at 574-81. Many CLI terms came directly from industry protocols or standards commonly used in the networking industry and even taught to college students. Tr. (Almeroth) at 1290:17-1292:4. These protocols are part of the foundation for communication over a network, which requires that "the different layers for communication all have to be consistent." Tr. (Almeroth) at 1289:15-24.

C. Cisco's CLI elements reflect functions, not original creative expression.

Cisco's own evidence proves that its choices for commands and other CLI elements merely reflected functional needs. CLI commands are names for what they do. TX 760 at 5 (Cisco chart of commands and descriptions including "show interface"); Tr. (Lougheed) at 624 ("command names"); Tr. (Remaker) at 689:19-24 ("nerd knob[s]"). Typing full command words is not required, just enough letters to identify a unique command. Tr. (Remaker) at 664. Commands should be logical, with a clear "rhyme and reason" (Tr. (Lougheed) at 573), and indicate their functions in terms the industry will understand. *E.g.*, TX 851; Tr. (Kathail) at 1089. Third parties also confirmed these functional needs. TX 9081 (Dell witness Cato Tr.) at 36:1-8 (discussing VLAN); Tr. (Juniper witness Shafer) at 2069:6-2072:8 (overlap between Juniper and Cisco). Functional limitations meant commands were usually created quickly—in seconds—using terms directly from standards documents. TX 9073 (Satz Tr.) at 76:4-8. The need for consistency throughout the CLI further reduces creativity. *See, e.g.*, Tr. (Remaker) at 658-59, 662, 664-65, 714; Tr. (Lougheed) at 506, 618. Help strings are also basic short phrases that are "very easy" and

⁴ For example, Lougheed used pre-existing standard phrases like "ip address" (Tr. (Lougheed) at 577:11-14), "mac address" (Tr. (Lougheed) at 579:14-23), and "boot system" (Tr. (Lougheed) at 580:6-15). Cisco also used pre-existing modes and help strings. Tr. (Lougheed) at 598-599 (EXEC and privileged modes copied from TOPS-20); Tr. (Lougheed) at 600 ("Delete a file" used in TOPS-20); Tr. (Lougheed) at 601-603 & TX 5724 (help string "Transmission Control Protocol" not original); Tr. (Li) at 1852:4-9, 1855:22-1857:14 (Cisco modeled CLI on TOPS-20).

"quick" to write, and simply describe what the command does. Tr. (Lougheed) at 604, 600-01, 603; Tr. (Slattery) at 749-50. Help strings must be "brief" and "short" to fit limited screen space. Tr. (Remaker) at 681-82; Tr. (Slattery) at 746-47. The point is to be helpful, not creative: the Gettysburg address would not fit the bill. Tr. (Lougheed) at 567.

Customers' needs for a clear and consistent CLI system further limited creativity.

According to Cisco, Cisco customers needed consistent CLI functionality to avoid the risk of a "catastrophic problem" if they used a command that a switch did not recognize. Tr. (Remaker) at 694-696. Cisco admitted "our [Cisco] customers prefer a common command line language." Tr. (Remaker) at 701:21-25. Customers would be "disoriented" and "upset" if command syntax changed from what they have "committed to muscle memory" so that commands "no longer work the way they are expecting." Tr. (Remaker) at 670. This is true both within and across Cisco's own systems, and with competitors: no customer wants to learn 20 different command languages.

Tr. (Remaker) at 701. Therefore, CLI engineers try to "think[] about what the customer might have" and ensure backwards "compatibility with what exists" and what customers already use.

Tr. (Remaker) at 653; Tr. (Remaker) at 714:17-19 ("we have to be consistent with stuff we've done before"); Tr. (Slattery) at 727:17-728:4 (need for "100 percent backwards compatibility").

To avoid these problems, Cisco established "Parser Police" guidelines to be followed wherever possible. Tr. (Remaker) at at 694-696; TX 851.

Cisco's only specific example of "creativity" confirms its absence. Cisco points to the command "show inventory" as its only concrete example of Cisco's purported creativity in CLI design—but Cisco's own account instead confirms the functional constraints above. See Tr. (Remaker) at 670:23-671:4. First, Cisco did not consider any alternatives to the word "show," because the pre-existing "show" hierarchy was the "natural" and "sensible" place to put the command, and Cisco (like others) used "show" already. Tr. (Remaker) at 673:2-21, 690:9-22. Second, the few options Remaker considered for the term "inventory" were considered because

⁵ Even Cisco's purported aesthetic goals for its CLI are actually functional dictates: the CLI should "work[] well" by being "consistent," meaning "that it behaves the way you expect"; it should be "useable," meaning "you can understand what the commands mean"; and it should be "friendly" meaning "easy to use and not crazy." Tr. (Remaker) at 653.

they "might better describe" the command's function. *Id.* at 674. Third, Remaker rejected those other choices because of functional needs, not creative judgment: one option would cause "a collision, so we couldn't do it" (675:15-16), another was "already being used" (675:9-10), two were "confusing" given other existing commands (675:1-4, 677:11-14), and two others were already being used on "some platforms" for other information (677:15-21). *See* Tr. (Remaker) 691:14-692:6 (Cisco considered these external constraints). This confirms other evidence that there are "quite limited" options for any given command within the basic structure of a CLI. Tr. (Duda) at 875-76; Tr. (Dale) at 1042-43. In fact, Mr. Lougheed repeatedly testified that multiple companies could create the *exact same commands* by "coincidence" simply by implementing the same functions and standards. Tr. (Lougheed) at 595-596, 616-620 (possible coincidence that DEC manual listed several commands Cisco claimed to author in same year, such as "arp timeout," "clear ip bgp," "distance bgp," "ip domain lookup," "ip domain name," "show ip bgp").

D. Cisco knew and accepted for years that the industry (including Arista) was using its CLI as a model.

Because Cisco had the lion's share of the market (80% according to its own Ms. Bakan, Tr. at 468:2-9), Cisco's CLI was widely emulated in the industry, and Cisco knew of this emulation and encouraged it. By the early 2000s, virtually every network vendor had built software that responded to the same or similar commands. Tr. (Giancarlo) at 991:8-9 (many competitors had similar CLIs by mid-to-late 1990s); Tr. (Volpi) at 2033-2035; Tr. (Juniper witness Shafer) at 2072:23-2074:19 (Juniper's goal for JUNOSe was to support same CLI features as IOS); Tr. (independent witness Li) at 1861:2–1864:25; Tr. (Black) at 2134:1-2138:22, 2139:24-2147:21 (many commands used by other companies), 2146:18-2147:24 (many competitors supported all four accused modes/prompts by the 1990s); TX 9053 (same). Some even replicated Cisco "bugs" in their CLI operations. Tr. (Li) at 1861:2-14 (Procket Networks). Many leading network vendors including Brocade, Extreme Networks, Dell, D-Link, Edgecore, Netgear and Juniper (JUNOSe) each use hundreds of the 500 commands that Cisco cherry-picked to assert against Arista. Tr. (Black) at 2142:16-2146:17, 2192:18-2196:5, 2199:5-2202:20; TX 5635 (Extreme); TX 5637 (HP); TX 5630 (Brocade); TX 5631 (Dell); TX 5632 (D-Link); TX 5639 (Juniper JUNOSe). In fact, Dell, one of Cisco's main competitors, uses more than 1000

1

3

4

5

7 8

6

9

1011

12

13 14

15

16

17

18 19

20

21

2223

24

25

26

2728

identical commands to Cisco, compared with the 506 allegedly copied by Arista. Tr. (Black) at 2203:22–2205:8; TX 9049 (Dell); Tr. (Almeroth) at 2539:8-18, 2545:13-2546:5 (no contrary analysis).

This vast overlap in CLI commands was no secret. Tr. (Volpi) at 2032-2035. Cisco knew by 2001 that Foundry, a "Tier 1" competitor, "copies CLI from IOS." TX 8966 at 10-11. Cisco files included competitor presentations showing that Nortel touted its "Cisco-like CLI" no later than August 2005. Tr. (Kathail) at 1091:24–1092:13; TX 5441 at 3 (Nortel presentation). Force10 and its successor Dell also published materials highlighting how similar its CLI was to Cisco's, and referred to its CLI as "an industry-standard Command Line Interface." TX 5326 (Force10 public datasheet promoting "Cisco-like CLI"); TX 5328 (Dell 2003 datasheet about its industry standard CLI); TX 6567 at 6, 9, and 11 (Force 10 datasheet offering a "[f]amiliar Cisco-styled CLI", an "industry standard CLI"). Dell witness Cato testified that a Cisco-like CLI is part of the industry-standard CLI that many vendors use. TX 9081 (Cato Tr.) at 35:04–35:07, 35:10–35:14, 64:09-64:18, 79:09-11, 79:13, 88:16-88:19, 88:22-88:24. Likewise, HP witness Venkatraman testified that "most vendors have overlapping command name and syntax." Tr. (Venkatraman) at 2326:11-14. HP also called its CLI "industry standard" because the industry "adopted a common set of commands to configure" routers. Tr. (Venkatraman) at 2310:4-2316:14; TX 5248 (HP 2005 datasheet); TX 5250 (HP 2008 datasheet); TX 5246 (HP 2012 datasheet); TX 6970 (HP datasheet explaining ease of migration from Cisco given "very similar command line interface").

These industry leaders, and many others, openly touted their use of the familiar "industry standard" CLI long before Arista released its first product in 2008, and trade journals regularly discussed the wide emulation of Cisco's CLI throughout the industry. Tr. (Ullal) at 1932:11-14 (Arista's first product); Tr. (Duda) at 814-15 (BNT, IS-CLI); Tr. (Kathail) at 1091-94 (Nortel, HP); TX 5328; TX 5248; TX 5416, 7731 (trade journals; "Cisco's CLI has become a standard in the industry, which many hardware vendors copy and promote when trying to get into Cisco accounts.").

Like the rest of the industry, Arista engineers knew of this common industry practice before designing Arista's CLI. Tr. (Duda) at 864:2-6 ("It was well understood in our industry

that most devices supported a color [sic: common] command-line interface."); TX 7876; Tr. (Dale) at 1033:24-1034:5 (knew at Cisco that other switch vendors had similar CLIs); TX 7748 (internal Arista email about BNT advertising that its CLI is "cisco-like' 'for optimal interoperability with Cisco(R) or other vendors' networks"); Tr. (Duda) at 814:4-815:21.

Cisco and disinterested witnesses testified that Cisco knew and relished the fact that many vendors used a similar CLI, viewing it as good for Cisco because it affirmed Cisco's market leadership by reminding customers of Cisco's presence. Tr. (Volpi) at 2033:22-2036:25, 2037:1-14. Cisco knew about other competitors' use of a Cisco-like CLI and vendors advertising a Cisco-like or industry standard CLI. Tr. (Kathail) at 1091:1-1092:13 (other companies have commands similar to Cisco), TX 5441 at 3; TX 5444 at 3; Tr. (Kathail) at 1094:1-5 (many such documents). Thus, Cisco repeatedly described and promoted its CLI as an "industry standard" or the "de facto standard." Tr. 1094-96 (Kathail); TX 5786 (Cisco 2003 presentation to AT&T); TX 8267 (Cisco's CLI "has been the de-facto standard in the industry"); TX 5134, 5299, 5155 ("CLI is de-facto industry standard"), 5451, 5454, 5457, 5786, Tr. (Remaker) at 699:14–700:4; Tr. (Volpi) at Tr. 2040:10-21, TX 8110; TX 9079 (Gourlay Tr.) at 74:22-75:5, 206:2-10. Even one of Cisco's patents explained that "[m]any companies now strive to support some variation on IOS CLI in their routing systems." TX 5001. Cisco touted this widespread use of its CLI. TX 0504 ("The Cisco IOS CLI has essentially become the standard for configuration in the networking industry."); TX 7996 ("Over the years, the basic look and feel of the command line interface has been mimicked by other manufacturers to the point where it is the de facto standard of network programming."); Tr. (Volpi) at 2043:5-12; TX 5464 ("One of IOS's biggest legacies is establishing the industry standard for how people interface with routers and switches -known as the command language interface, or CLI. 'Anyone who goes to configure a competitor's product feels very much at home,' Bion says."); Tr. (Remaker) at 701:13-25; Tr. (Cisco expert Chevalier) at 2607:2-2609:12 (no basis to dispute testimony about other companies' use of "almost identical" CLIs).

27

28

26

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

⁶ A Cisco glossary defined "de facto standard" as "A standard by usage rather than official decree; a default standard" (TX 9014), which Cisco's Philip Remaker agreed was a reasonable definition. Tr. (Remaker) at 698:1–699:13.

1

3

45

6 7

8

10

1112

13

1415

16

17

18

1920

21

2223

24

2526

27

28

E. Cisco only claimed copyright in CLI elements after Arista's transformative innovations left Cisco behind.

Cisco's pre-litigation conduct shows this widespread use of Cisco CLI was the accepted custom and practice in the industry. Cisco admitted it had no problem with the level of overlapping CLI commands used by Dell, Brocade, Foundry, and HP. Tr. (Kathail) at 1090-91. Cisco never sued Dell, Blade Networks, or IBM for copying its CLI. Tr. (Lang) at 1183-84. Cisco was perfectly happy to have Cisco customers "feel at home on competitors' products," because it was good for Cisco. Tr. (Kathail) at 1086:14-22; TX 494 (Bion press release). Cisco executives understood "from the late 90's on, that the CLI commands were not protectable," and thus did not tell competitors openly copying the Cisco CLI that they could not do so. Tr. (Giancarlo) at 991:12-17; Tr. (Giancarlo) at 999:21-23 ("I have, since the late 90's, understood, spoken about and believed that the commands themselves are not protectable."); Tr. (Giancarlo) 991, 996. Instead, Cisco chose to promote the CLI as a *de facto* standard for the industry, for its own benefit. Tr. (Giancarlo) at 996; Tr. (Kathail) at 1095 (AT&T). Other former Cisco employees testified they never "discussed the CLI as being ... proprietary to [Cisco] or preventing other people from using it." TX 9079 (Gourlay Tr.) at 205:1-9. Cisco set the standard used by competitors, and said so publicly. Tr. (Kathail) at 1084-85; TX 494 (press release). Cisco even acknowledged that a 10-20% overlap in CLI commands—more than the overlap asserted here—is normal in the industry. TX 4672 (Huawei settlement); Tr. (Lang) at 1189-91.

Cisco also knew all about Arista's use of Cisco-like CLI by 2009. *See* TX 9077; TX 9079 (Gourlay Tr.) at 75:13-18, 75:20-22, 76:25-77:02, 86:19-25, 211:12-23; TX 5365 at 49; Tr. (Jiandani) at 2279:25–2280:11; TX 9080 (Malik Tr.) at 80:3-15; TX 5416 at 10 (article re Arista and other vendors having a Cisco-like CLI in 2010); TX 5215, Tr. (Jiandani) at 2282:22–2287:3; TX 5416. Cisco dedicated significant business resources to beating Arista in the market—but never attacked Arista's use of Cisco-like CLI until after Cisco's business tactics failed to stop Arista. TX 5300 at 4, 6 ("Cisco-wide effort to stop Arista's growth" despite its "small size"); TX 5315 at 2; TX 5316 at 16 ("Arista killer...team"); *see also* TX 6082; Tr. (Jiandani) at 2292:13–2293:1 (Cisco bulls-eye targeting Arista's CEO).

Cisco changed its tune only after (as Cisco's own engineers testified) Arista introduced an

innovative "new paradigm" that reflected massive changes in the networking market. TX 5119 at 17; TX 9078 (Patil Tr.) at 113:9-16, 104:24-105:5; *see also* Tr. (Black) at 2120:12-20; TX 7790 (customer calling Arista "the most transformative networking company in 20 years"); Tr. (Slattery) at 754:15-22 (massive market changes). Arista transformed the CLI by enabling customers to use it in a completely different way, with a programmatic approach where software—rather than an engineer typing into a keyboard—dynamically decides how to configure the device, and issues commands via a different automated mechanism. Tr. (Black) at 2616:6–2619:20, 2120:21–2124:24; TX 7408. Arista also allowed customers to customize the CLI (as well as all aspects of its operating system), transforming it from a closed, fixed interface to an open, extensible interface where the customer could "rewrite any part of the CLI [it] want[s]" by adding new commands or changing command and help strings, so that the CLI behaves exactly as the customer wants it to behave. TX 25 at 1; Tr. (Cisco expert Jeffay) at 1478:1-9, 1478:16-1480:2; TX 7357; Tr. (Black) at 2118:21–2120:11.

F. Cisco failed to compete with Arista's transformative products on their technical merits, not because of the CLI.

No one at Cisco expressed concern that Arista was using a similar CLI—just like Cisco's other competitors did. *See* TX 9080 (Malik Tr.) 68:09-12; Tr. (Jiandani) at 2286:16-2287:7. Rather, Cisco knew that if it lost sales to Arista, it was because Arista was providing superior technology and service. TX 5316 at 7 (Cisco listing of non-CLI reasons for failures); TX 5495 at 2 ("Arista is outperforming Cisco on price, product, roadmap and vision."); TX 5219 at 2 (unlike Arista, "we [Cisco] have FAILED to deliver critical features for Microsoft for the last 5 months of them ASKING repeatedly."); TX 7977 at 1 (Cisco email re "battling Arista in pretty much all the accounts on the programmability front"); TX 5382 at 1 (Facebook complaint that "Cisco is behind the curve and is on target to become irrelevant not only in the Facebook Data Center but in the majority of, if not all but commercial, data centers."). In fact, Cisco admitted that "the industry is moving away from CLI" (Tr. (Kathail) at 1107), and some at Cisco viewed it as "an archaic dinosaur from the past." *Id.*; TX 7956 at 4; *see also* Tr. (Jiandani) at 2287:4-15 (customers cared about non-CLI features); Tr. (Dale) at 1019:1-2 (CLI "wasn't a main selling point" in Cisco marketing).

Even Cisco's then-CEO, John Chambers, admitted that Cisco missed "a very important transition in networking." Tr. (Chambers) at 1725:6-19. Many others at Cisco acknowledged Arista's superior, transformative innovations, and Cisco's failure to match them: "Cisco has missed or has been late to important technology innovations, and has been slow to innovate on business models and operational processes." TX 5168 at 4.

Any Cisco losses to Arista in the market resulted from this failure to innovate and offer competitive hardware and software—not from any use of Cisco CLI features. Mr. Chambers conceded that Cisco lost Microsoft business to Arista not because of its CLI, but because Cisco "missed multiple road map commitments." Tr. (Chambers) at 1734:5-9; TX 5219. Other customers, like Morgan Stanley, also "lost confidence" in Cisco due to "software defects, instability, and a lack of needed features"—not the CLI. TX 7604. Even Cisco's damages expert Dr. Chevalier admitted that the CLI "can't be the reason why Arista won" deals over Cisco (Tr. (Chevalier) at 1574:6–17) because Arista's CLI was "not a differentiator versus Cisco." Tr. (Chevalier) at 1574:21-1575:13; *see also* Tr. (Chevalier) at 1679:2-5 ("the CLI is not a reason a customer chooses an Arista switch over a Cisco switch"). By the same logic, use of a Cisco-like CLI cannot be the reason for a customer to choose any other competitor over Cisco—including the many competitors who had been copying Cisco's CLI for years (*see supra* Part II.D). *See*, *e.g.*, Tr. (Chevalier) at 1575:14-18 (for any two companies with similar CLIs, there must be "some other reason for customers to choose one versus the other"); Tr. (Chevalier) at 2605:15-2606:25 (many non-CLI reasons why customer chose Arista over Cisco); TX 5316; TX 5496.

III. CISCO'S COPYRIGHT CLAIMS FAIL—AND ARISTA'S DEFENSES SUCCEED—AS A MATTER OF LAW

"Judgment as a matter of law is warranted when the evidence presented at trial permits only one reasonable conclusion." *Peralta v. Dillard*, 744 F.3d 1076, 1085 (9th Cir. 2014) (en banc) (internal quotation omitted) (affirming grant of JMOL). The court "should review the

See, e.g., Tr. (Remaker) at 705:7–708:20 (Arista beat Cisco in implementing commands using Jabber, a chat tool); TX 5161 ("Arista has an XMPP based CLI, very cool. Wish we had done this."); Tr. (Bakan) at 483:15-19 (Cisco needed to develop JSON interface to match Arista); TX 5162 (Remaker on an Arista innovation: "Wow. . . . I wish IOS did this."); TX 6736 (Cisco in 2014: "Arista has arguably the best device programmability today.").

record as a whole," making reasonable inferences in favor of the non-moving party, and "may not substitute its view of the evidence for that of the jury." *Johnson v. Paradise Valley Unified Sch. Dist.*, 251 F.3d 1222, 1227 (9th Cir. 2001) (internal quotations omitted). Still, "threadbare conclusory statements" and unreasonable inferences cannot support a verdict. *Lakeside-Scott v. Multnomah Cty.*, 556 F.3d 797, 802 (9th Cir. 2009) (reversing denial of JMOL). In addition to evidence favoring the nonmoving party, the court must also credit "evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that that evidence comes from disinterested witnesses." *Reeves v. Sanderson Plumbing Prod., Inc.*, 530 U.S. 133, 151 (2000) (internal quotation omitted). For all the reasons below and in Arista's Rule 50(a) motion, a reasonable jury here must return a verdict wholly in Arista's favor.

A. Cisco lacks sufficient evidence that it owns any protectable original expression in the asserted CLI.

Considered separately or in any combination, Cisco's CLI elements are uncopyrightable and/or unprotectable under Section 102(a) and (b) and the words and short phrases doctrine.

1. Cisco lacks adequate proof of original authorship.

Original authorship is the most fundamental requirement for copyright, and Cisco's claims cannot survive without it: "The *sine qua non* of copyright is originality." *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991); 17 U.S.C. § 102(a). But Cisco lacks sufficient evidence to prove that the 506 commands and 216 help descriptions it asserts (or the thousands of others) are the result of its original authorship. Except for a few dozen commands and two mode names Mr. Lougheed identified as his own work, and Mr. Remaker's testimony about "show inventory," Cisco presented *no substantial evidence* of who created its CLI commands, command outputs, and help descriptions, or what sources they drew from. *See* Tr. (Lougheed) 603-04 (no knowledge of others' help strings; Cisco does not track this); Tr. (Remaker) 689 (no

⁸ See Tr. (Lougheed) 569:4-17 (36 commands); Tr. (Lougheed) 508 (modes); Tr. (Remaker) 670-71 ("show inventory"). In fact, even several of these few commands appeared in a DEC manual by the year Cisco asserted he created them. See supra Part II.C.

⁹ Undisputed evidence shows that features of Cisco's interfaces were copied from pre-existing systems or sources, defeating any presumption of originality. *See supra* Part II.B-C. Also, although not always discussed separately, the record makes clear that Cisco's asserted command outputs (TX 4800) are unprotectable for all the same reasons as its commands and help strings.

knowledge of creation of other commands), Tr. (Remaker) at 1536-37 (no personal knowledge); Tr. (Slattery) at 748:17-749:1 (no knowledge re help string authorship); Tr. (Remaker) at 1538 (Cisco's lack of information about authorship); Tr. (Bakan) at 470:1-4 (no authorship knowledge). Cisco's only other evidence of authorship for its CLI elements is its summary exhibits. At most, though, these prove only that Cisco's operating systems and manuals contain the asserted commands and other elements—not that they were original to Cisco or express creativity. *See* TX 4789 (commands); TX 4799 (help strings); TX 4800 (command outputs). Any inference of original creative expression on this record would be unreasonable.

Cisco has proven at most that assembling its CLI involved effort and (at least in some cases) some choice. Instead of detailed factual proof, Cisco relies on a theory that its asserted CLI features are creative and protectable because they resulted from a creative "process." Cisco's "process" theory is legally defective because copyright does not protect an author's effort, only her creative expression. *VMG Salsoul, LLC v. Ciccone*, 824 F.3d 871, 885 (9th Cir. 2016) ("[T]he Copyright Act protects only the expressive aspects of a copyrighted work, and *not* the 'fruit of the [author's] labor.'") (emphasis original; quoting *Feist*, 499 U.S. at 349–54). Allowing Cisco's cursory "process" evidence to prove creativity—without proof of creativity in the CLI itself—would violate the Supreme Court's guidance in *Feist* by granting Cisco protection for the work it has done, rather than any resulting creative expression. Moreover, as described above, Cisco also lacks substantial evidence that the "process" it describes was followed for any but a few of its asserted CLI elements. *See, e.g.*, Tr. (Remaker at 689-90).

Further, as discussed below, Cisco failed to introduce substantial evidence of originality in any compilation of CLI elements.

2. Cisco's asserted CLI elements are unprotectable under Section 102(b).

A fundamental rule of copyright is that ideas—including systems and methods—cannot be protected by copyright; only creative *expression* of ideas is copyrightable. *Baker v. Selden*, 101 U.S. 99 (1879); 17 U.S.C. § 102(b) ("Section 102(b)"). Here, Cisco's witnesses describe the CLI in purely functional terms as a "mechanism" for managing networking devices and a method of operation within Cisco's operating systems. Both the individual CLI elements, and Cisco's

overall compilations of features, simply reflect the functions and features of the system. See supra Part II.A-C. Indeed, Cisco's own expert testified that Cisco's arrangement of modes and prompts asserted here is an "idea." Tr. (Almeroth) at 1238. Section 102(b) precludes protection for that idea, and for every other asserted part of Cisco's CLI.

No reasonable jury could find that Cisco's CLI elements satisfy Section 102(b), because Cisco has not proven any original creative expression separable from the CLI systems or methods of operation that are unprotectable under Section 102(b). Because of their "essentially utilitarian nature," and to protect fair competition, "many aspects" of computer programs are not entitled to copyright protection. Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1524-25 (9th Cir. 1992). In some cases, "even the exact set of commands used . . . is deemed functional rather than creative." ¹⁰ Id.; see also Bikram's Yoga College of India v. Evolation Yoga, 803 F.3d 1032, 1039-40 (9th Cir. 2015) (citing Sega); Feist, 499 U.S. at 350 (rule "severely limits the scope of protection"). This rule bars Cisco's claims here.

3. Cisco has failed to prove any of its asserted CLI elements or combinations thereof are protectable creative expression.

A reasonable jury could not find that any of the CLI elements or combinations of elements that Cisco asserts contain the requisite spark of original creative expression necessary for copyright protection, and not dictated by factors other than creative choice. Although the "amount of creative input by the author required to meet the originality standard is low, it is not negligible," and more than "merely trivial" creativity is needed. Satava v. Lowry, 323 F.3d 805, 810 (9th Cir. 2003); Matthew Bender & Co. v. W. Pub. Co., 158 F.3d 674, 682 (2d Cir. 1998) (internal citations and quotations omitted). As *Matthew Bender* explains, "[t]he creative spark is

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

²⁴ 25

²⁶

²⁷ 28

Courts routinely deny copyright protection, under various theories, for similarly functional sets of commands and menus (as distinct from specific code implementing them). See Ashton-Tate Corp. v. Ross, 916 F.2d 516, 521–22 (9th Cir. 1990) (list of commands); Dream Games of Arizona, Inc. v. PC Onsite, 561 F.3d 983, 989 (9th Cir. 2009) (video game menu); see also Allen v. Academic Games League of America, Inc., 89 F.3d 614, 617–18 (9th Cir. 1996) ("abstract rules and play ideas" for games not copyrightable); MiTek Holdings, Inc. v. Arce Engineering Co., Inc., 89 F.3d 1548, 1556-57 & n.19 (11th Cir. 1996) (menu and "sub-menu command tree structure" implementing functional steps in a process not copyrightable); Mitel, Inc. v. Iqtel, Inc., 124 F.3d 1366, 1373 (10th Cir. 1997) (no copyrightable expression in system of "command codes" used in telephone systems); Eng'g Dynamics, Inc. v. Structural Software, Inc., 26 F.3d 1335, 1347-48 (5th Cir. 1994) (remanding questions about input/output formats for technical information).

missing where: (i) industry conventions or other external factors so dictate selection that any 1 2 person composing a compilation of the type at issue would necessarily select the same categories 3 of information, or (ii) the author made obvious, garden-variety, or routine selections." *Id.* 4 (internal citations and quotations omitted). "Protection of such choices would enable a copyright 5 holder to monopolize widely-used expression and upset the balance of copyright law." *Id.* Using 6 existing industry labels for functions, as Cisco did here, fails the low bar for originality. See supra 7 Part II.A-C. This record compels the conclusion that Cisco's asserted CLI components lack the 8 creative "spark" required for copyright protection.

4. Command "names" and help strings are unprotectable short phrases.

The record is clear that the asserted commands and help strings are names and trivial functional phrases dictated by the ordinary functional demands of networking. ¹¹ See supra Part II.A-C. They are thus unprotectable under the words and short phrases doctrine as a matter of law, both individually and taken together. See 37 C.F.R. § 202.1(a); Narell v. Freeman, 872 F.2d 907, 911 (9th Cir. 1989) (no protection for "ordinary" factual phrases). It is "axiomatic that copyright law denies protection to 'fragmentary words and phrases' and to 'forms of expression dictated solely at functional considerations" because such materials lack the creativity to warrant copyright protection. CMM Cable Rep, Inc. v. Ocean Coast Properties, Inc., 97 F.3d 1504, 1519–20 (1st Cir. 1996) (no protection for "clock in and make \$50 an hour"). ¹²

B. Cisco has not proven any protectable compilation of CLI elements.

Cisco also lacks substantial evidence that its selections of CLI features asserted here—only a small fraction of any complete works, *see supra* Part II.A—were authored or "fixed in any tangible medium of expression" before this litigation. *See* 17 U.S.C. § 102(a). For a compilation of unprotectable elements to receive copyright protection under Ninth Circuit law, there must be some "creative spark" in the author's arrangement of those elements *within the work itself*, not in

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

Cisco's expert's conclusory *ipse dixit* is not substantial evidence that help strings like "Delete a file" and "Rename a file" were "elegant" and "creative." *See* Tr. 1394:12-18; Tr. 1394:19-1395:6.

¹² See also Alberto-Culver Co. v. Andrea Dumon, Inc., 466 F.2d 705, 711 (7th Cir. 1972) (no protection for "the most personal sort of deodorant"); *Hutchins v. Zoll Med. Corp.*, 492 F.3d 1377, 1384–85 (Fed. Cir. 2007) (3–5 word CPR instructions); *Greene v. Ablon*, 914 F. Supp. 2d 110, 117 (D. Mass. 2012), *aff*"d, 794 F.3d 133 (1st Cir. 2015) (lengthy "fragmentary" phrases); *Pelt v. CBS, Inc.*, No. CV-92-6532, 1993 WL 659605, at *3 (C.D. Cal. Oct. 25, 1993).

what the defendant allegedly copied. See Satava, 323 F.3d at 811.

Cisco has never identified any selection or arrangement of CLI elements containing any "creative spark" or pre-dating this litigation, let alone proved it by substantial evidence at trial, as needed to support copyright protection in a compilation or arrangement. The 506 asserted commands, for example, simply reflect what Arista allegedly copied, cherry-picked by Cisco for this litigation. Tr. (Black) at 2620:25-2621:17. Likewise, although Lougheed described the four asserted modes as "the main modes of the system" (Tr. (Lougheed) at 510:17-21), they are not the only modes (Tr. (Almeroth) at 1381:3-18 (over 100 modes); Tr. (Lougheed) at 597 (IOS has dozens)), and Cisco lacks substantial evidence that those four modes exist as a pre-litigation arrangement within the CLI—in fact, Cisco admits they are not displayed together to a user as Cisco has presented them in this litigation (Tr. (Lougheed) at 597). The only pre-existing "compilation" Cisco could have presented at trial is the Cisco user interface as a whole, including all of the commands in each Cisco operating system. But Cisco failed to prove its complete interfaces (see below), and there can be no protectable expression in devising sets of CLI features driven by the functional choice to implement a certain set of features or protocols, because no one can own copyright in the idea of choosing to implement that set of functions. See Section 102(b).

C. No reasonable jury could find Cisco has proven infringement given the "thin" protection that applies to Cisco's works.

Cisco has not introduced evidence sufficient to prove actionable or *illicit* copying of protected material under either the Ninth Circuit's extrinsic or intrinsic infringement tests (and both must be met to prove infringement). Rather, the trial record makes clear that only a small portion of each asserted work was copied, much (or all) of which was not protected material. No reasonable fact-finder could find infringement under the "virtual identity" test that applies to works meriting only thin copyright protection.

This is true whether the "virtual identity" standard is applied as a core requirement of the infringement test (as Ninth Circuit law requires), or as a test only for proving copying by indirect evidence (as the jury was instructed here over Arista's objections). The virtual identity test applies either way, because Cisco lacks substantial direct evidence that Arista copied protected material. Substantial evidence may show that Arista copied *something* from Cisco—but there is

no direct evidence or admission that it copied *protected material*, as needed for infringement. The Ninth Circuit's virtual identity or substantial similarity test must be applied to assess infringement even where factual copying is undisputed—unless the undisputed copying is of the *entire* copyrighted work. *See DC Comics v. Towle*, 802 F.3d 1012, 1026 (9th Cir. 2015). By Cisco's own account, only a small fraction of any relevant work has been copied—and Cisco has not presented adequate evidence of the complete works for the jury to assess infringement.

1. Cisco has failed to show "virtual identity" of the works as a whole (omitting unprotectable elements) as needed to prove illicit copying.

Courts have long acknowledged that factual and functional works are entitled to thinner copyright protection than fictional or other artistic works. ¹³ See Feist, 499 U.S. at 340; Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 563 (1985). Where choices are constrained by limitations inherent in an endeavor, so that the range of possible expression is narrow, a copyright holder is entitled to only "thin" copyright protection. In such cases, infringement requires proof of "virtual identity" between the disputed works (disregarding unprotected elements), rather than the "substantial similarity" required for infringement of a work that receives broad copyright protection. Apple Computer, Inc. v. Microsoft Corp., 35 F.3d 1435, 1442–43 (9th Cir. 1994); see also Mattel, Inc. v. MGA Entm't, Inc., 616 F.3d 904, 915 (9th Cir. 2010); Ets-Hokin v. Skyy Spirits, Inc., 323 F.3d 763, 766 (9th Cir. 2003) ("thin" copyright "protects against only virtually identical copying"); 4-13 Nimmer on Copyright § 13.03.

Here, the evidence shows that the asserted CLI elements are functional, and chosen from a narrow range of possible expression in this highly technical field. *See supra* Parts II.A-C. To be useful, the Cisco CLI had to select from a limited vocabulary of recognizable industry terms to invoke standard industry protocols and functions—not randomly selected "creative" words. Thus, copyright protection is "thin" and infringement requires "virtual identity" between the disputed works (considering the works as a whole, but disregarding unprotectable elements). *See Apple*, 35 F.3d at 1442–43; *Mattel*, 616 F.3d at 914–15 ("thin" protection for fashion doll sculpt); *Data*

The rules for broad and thin protection differentiate between factual/functional and fictional/creative **literary works**—not textual ("literary") and non-textual works. *See Landsberg v. Scrabble Crossword Game Players, Inc.*, 736 F.2d 485, 488 (9th Cir. 1984) (Scrabble guide); *Feist*, 499 U.S. at 350 (phonebook). No substantial evidence supports broad protection here.

East USA v. Epyx Inc., 862 F.2d 204, 209 (9th Cir. 1988) (protection only against "identical copying" for computer karate game); L.A. Printex Indus., Inc. v. Aeropostale, Inc., 676 F.3d 841 (9th Cir. 2012) (wide range of expression for textile designs). See also ECF 715 at 15-18. But Cisco lacks adequate evidence to meet the virtual identity test, and made no real effort to do so.

2. Cisco lacks sufficient evidence to prove infringement even under the substantial identity test for works receiving broad protection.

Even if the substantial similarity standard for infringement were to apply here, Cisco's claim would fail on this record, because the works as a whole are not "sufficiently similar to support a finding of illicit copying." *See Apple*, 35 F.3d at 1443. In fact, Arista's accused copying from Cisco's command-line interfaces is *de minimis* and not actionable as a matter of law when properly compared to Cisco's entire works. *VMG Salsoul, LLC v. Ciccone*, 824 F.3d 871, 877 (9th Cir. 2016) (*de minimis* rule). There is insufficient evidence to support a contrary finding, given the limited scope of accused copying and the size of the works (whether defined as the interfaces or the operating systems). The doctrines of *scenes a faire* and merger also defeat infringement under either standard. 14

D. The jury lacked sufficient evidence to consider and compare the disputed works as a whole—or even to define their scope.

Under express Ninth Circuit law, without adequate evidence of the works as a whole, the jury could not conclude that any alleged copying was actionable as infringement, and its verdict cannot be sustained. "There can be no proof of 'substantial similarity' [or virtual identity] and thus of copyright infringement unless [plaintiff's] works are juxtaposed with [defendant's] and their contents compared." *Antonick v. Elec. Arts, Inc.*, 841 F.3d 1062, 1066 (9th Cir. 2016) (affirming defense JMOL after infringement verdict where complete works were not in evidence; citing *Mattel*, 616 F.3d at 913–14). The complete asserted works must be in evidence to support an infringement verdict. *Id.* Here, Cisco failed to put its complete works at issue (or Arista's

Under Ninth Circuit law, the evidence that supports *scenes a faire* as an affirmative defense necessarily defeats Cisco's infringement claim. Cisco's CLI elements are *scenes a faire* (as the jury found), and also merge with their functions or ideas and contain no separable expression. *See* 17 U.S.C. § 102(b); *Apple*, 35 F.3d at 1444; *Mattel*, 616 F.3d at 913. Because merger and *scenes a faire* are properly part of the infringement analysis itself (negating of Cisco's proof of infringement), not affirmative defenses, Cisco's infringement claim fails as a matter of law. *See Ets-Hokin v. Skyy Spirits*, *Inc.*, 225 F.3d 1068, 1082 (9th Cir. 2000); *Satava*, 323 F.3d at 807.

accused works) into evidence, or even to define its works adequately. Thus, the jury lacked sufficient evidence to compare the works as a whole as required under *Antonick*. ¹⁵ *Id.; see also, e.g., Apple*, 35 F.3d at 1446 ("Under *Harper House* and *Frybarger*, there can be no infringement unless the works are virtually identical.").

Cisco's manuals do not evidence its works *as a whole*. There is no substantial evidence that the manuals contain *all* aspects of the operating system user interface, including but not limited to commands, modes and prompts, help descriptions, command responses (as well as all unasserted user interface attributes) for any work. Cisco conceded in argument that manuals do not prove "the totality of what's implemented in the product." Tr. at 1899:14-22, 1901:10-15. Likewise, Cisco's copyright deposits for its 26 registrations (in evidence as TX4803) are not evidence of the complete works. Dan Lang, Cisco's sponsoring witness, testified that TX4803 is "the materials themselves that were sent to the Copyright Office, along with an index to them." Tr. (Lang) 1168:15-16. TX 4803 however, does not contain complete source code for any of the registered works. And mere *excerpts* of source code are not evidence of the works as a whole. ¹⁶

E. No substantial evidence proves Cisco's "user interfaces" are copyrighted works separate from Cisco's complete registered operating systems.

Cisco lacks sufficient evidence to prove that its "user interfaces" are separable from its operating systems, as required for them to be independent copyrighted works. Cisco never separately registered its "user interface" apart from its 26 operating system versions, and offered no substantial evidence of any separate existence for its purported "user interface" works. Rather, the record confirms that the interfaces are merely non-literal elements of the operating systems; Cisco does not use, value or even define them separately. *See supra* Part II.A. For a work to be separately asserted, however, it must be one that "can live [its] own copyright life' and 'has an independent economic value and is, in itself, viable." *Monge v. Maya Magazines, Inc.*, 688 F.3d

¹⁵ During trial, the Court asked Cisco to provide a list of the exhibits that constituted Cisco's works. Tr. 1628. Cisco never did so, even after Arista raised the issue in its Rule 50(a) motion.

¹⁶ In fact, for 18 of the 26 copyright registrations, the index in TX4803 does not refer to any linked materials at all. TX 4803. For seven of the eight registrations that refer to linked materials, those materials are described as documentation. And for the IOS 12.1, the sole registration that refers to "source code" as being included in the linked materials, none of those linked materials actually include any C source code, even though IOS is written in C.

1164, 1180 (9th Cir. 2012) (photographs as works) (quoting *Columbia Pictures TV, Inc. v. Krypton Broad. of Birmingham, Inc.*, 259 F.3d 1186, 1193 (9th Cir. 2001) (TV show episodes as works)). An amorphous abstraction of a software program like the "interfaces" Cisco asserted here cannot be the "work" at issue. *See NXIVM Corp. v. Ross Inst.*, 364 F.3d 471, 480-81 (2d Cir. 2004) ("modules" of a manual not separate works); *see also Sony Computer Entm't Am., Inc. v Bleem, LLC*, 214 F.3d 1022, 1028 (9th Cir. 2000) (video game screen shots "an insignificant portion of the complex copyrighted work as a whole"). Cisco's user interface has no value or "copyright life" separate from the operating systems and cannot be an independent "work."

Cisco also lacks sufficient evidence that the "user interfaces" asserted here are fixed in a tangible medium of expression, as required by copyright law. 17 U.S.C. § 102(a). Cisco purports to assert an abstract work entirely separated from its operating system's source code (and consolidated across multiple separate versions of each operating system)—but the interface exists only as a function of the source code (itself fixed in a tangible medium), as a non-literal element manifested by that code. *See Johnson Controls, Inc. v. Phoenix Control Sys.*, Inc., 886 F.2d 1173, 1175 (9th Cir. 1989), *overruled on other grounds as stated in Perfect 10 v. Google*, 653 F.3d 976 (2011). Without some grounding in source code, there is nothing fixed about Cisco's asserted works: the commands are entered by users, and the outputs and help strings are fixed in the code. *See supra* Part II.A; Tr. (Lougheed) at 501:24-502:5 (explaining CLI use).

F. Arista's conduct is fair use as a matter of law.

A reasonable jury must find on this record that Arista's use of any and all Cisco works is fair use as a matter of law, based on any reasonable application of the relevant factors, both individually and in any combination. The record requires this result based on the defects in proof of original creative expression in the CLI components at issue (see above); the limited portions even allegedly copied; Arista's highly transformative use of the CLI with revolutionary technology that created a new paradigm and new market; the lack of sufficient evidence of market harm or potential market harm; and the longstanding custom and practice in the industry (and by Cisco) of permitting and promoting others' use of CLI commands and features. Cisco's works fall so far on the outer fringes of copyright protection that (even assuming *arguendo* that some

protection existed) no reasonable jury could fail to find Arista's use was fair on this trial record.

Fair use involves four "nonexclusive" statutory factors: (1) "the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;" (2) "the nature of the copyrighted work;" (3) "the amount and substantiality of the portion used in relation to the copyrighted work as a whole;" and (4) "the effect of the use upon the potential market for or value of the copyrighted work." *Harper & Row*, 471 U.S. at 549, 560, 588; 17 U.S.C. § 107. No single factor is dispositive. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577–78 (1994). Fair use also can exist "where a 'reasonable copyright owner' would have consented to the use, i.e., where the 'custom or public policy' at the time would have defined the use as reasonable." *Wall Data Inc. v. Los Angeles Cnty. Sheriff's Dept.*, 447 F.3d 769, 778 (9th Cir. 2006).

The first factor—"the purpose and character of the use"—considers "whether and to what extent the new work is transformative" and "serves a commercial purpose." Oracle America, Inc. v. Google Inc., 750 F.3d 1339, 1374 (Fed. Cir. 2014) (Oracle I). Commercial use does not preclude fair use where the use is transformative. Hustler Magazine Inc. v. Moral Majority Inc., 796 F.2d 1148, 1152 (9th Cir. 1986). Rather, "the more transformative the new work, the less will be the significance of other factors, like commercialism[.]" Campbell, 510 U.S. at 579; see Oracle America, Inc. v. Google, Inc., No. 10-cv-03561-WHA, 2016 WL 3181206, at *8, n.7 (N.D. Cal. June 8, 2016) (Oracle II) (denying Oracle's Rule 50 motion following a fair use verdict); Oracle I, 750 F.3d at 1376 (remanding for trial on fair use despite largely crediting Oracle's assertion that "Google knowingly . . . copied a creative work to further its own commercial purposes, did so verbatim, and did so to the detriment of Oracle's market position"). Here, current and former Cisco engineers admitted Arista's use was highly innovative and captured a massive market shift that Cisco missed. See supra Part II.E-F (Arista innovations). The entire industry (including Cisco) treated Cisco's CLI as an open standard, and Arista followed that practice in good faith. A mere failure to seek permission for copying, in itself, does not constitute bad faith. See Campbell, 510 U.S. at 585 n.18; Blanch v. Koons, 467 F.3d 244, 256 (2d Cir. 2006) (listing cases). "If the use is otherwise fair, then no permission need be sought or

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

granted." Id.

The second statutory factor concerns "whether the work is informational or creative." *Oracle I*, 750 F.3d at 1375 (citations omitted). "The law generally recognizes a greater need to disseminate factual works than works of fiction or fantasy." *Harper & Row*, 471 U.S. at 563.

Thus, works that are "largely functional" can "receive[] only weak protection." *Sega*, 977 F.2d at 1527 (citation omitted). By Cisco's own account, its works are functional and informational, with little scope for creativity, and this factor heavily favors fair use. *See supra* Part II.A-C.

Widespread use of shared commands also benefits the public and the "useful arts" by promoting interoperability. TX 9079 (Gourlay Tr.) at 72:09–73:01 (using customers' knowledge base helps reduce network crashes); Tr. (Duda) 813:17-815:21 (BNT and other vendors offered Cisco-like CLI for interoperability); Tr. (Ullal) 1969:21-25 (Cisco wanted multi-vendor interoperability); *see Oracle II*, 2016 WL 3181206, at *11 ("jury could reasonably have given weight to the fact that cross-system confusion would have resulted" without "a common set of command-type statements," which helps advance the "useful arts").

The third factor also favors Arista: "the amount and substantiality of the portion used in relation to the copyrighted work as a whole." 17 U.S.C. § 107(3). This factor does not weigh against a user who "only copies as much as is necessary for his or her intended use." *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 820–21 (9th Cir. 2002). Arista used only a very small subset of Cisco's CLI features. *See supra* Part II.A. Also, both Cisco and Arista created commands needed to reflect the (unprotectable) functions they chose to implement in their respective operating systems. Requiring multiple versions of basic commands would not serve the public interest.

The fourth fair-use factor considers "the effect of the use upon the potential market for or value of the copyrighted work." *Harper & Row*, 471 U.S. at 566. This includes the infringer's own impact, as well as the potential impact of "unrestricted and widespread conduct" of the same kind. *Campbell*, 510 U.S. at 590 (citations omitted). In assessing market harm, however, "a balance must sometimes be struck between the benefit the public will derive if the use is permitted and the personal gain the copyright owner will receive if the use is denied." *MCA*, *Inc.* v. *Wilson*, 677 F.2d 180, 183 (2d Cir. 1981). Here, Cisco admits that networking customers want

1 | a s | sup | 3 | is t | 4 | rec | 5 | Cis | 6 | Cis | 7 | cus | 8 | (Ci | 9 | Ar | 10 | cus | 11 | tha | 12 | Tra

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

a single unified command language, and risk substantial operational problems without one. *See supra* Part II.C (external and customer constraints). Also, when the defendant's use of the work is transformative, "market harm may not be so readily inferred." *Campbell*, 510 U.S. at 591. The record shows that any competitive harm here resulted from Arista's technical innovations (and Cisco's failures), not Cisco's CLI. (Cisco also lacks evidence of any separate market for its CLI.) Cisco's expert Dr. Chevalier testified that use of a Cisco-like CLI could not be the reason for any customer's choice to do business with Arista. Tr. (Chevalier) at 1574:6–17; *see supra* Part II.F (Cisco failure to compete). Indeed, many competitors had been using Cisco CLI for years before Arista did, but failed to compete as successfully. *See supra* Part II.D (industry CLI use). Key customers' use of multi-vendor networks including CLIs different from Cisco's further proves that use of Cisco CLI does not cause market harm. *See* Tr. (Chevalier) at 2596-97 (Facebook). Transformative use like Arista's simply promotes legitimate competition. *See Sony Comp. Entertainment, Inc. Connectix Corp.*, 203 F.3d 596, 607-08 (9th Cir. 2000).

Finally, Arista's use was fair here because a reasonable copyright owner would have consented to Arista's use as a matter of industry custom and practice—as Cisco did for many years. *See supra* Part II.D-E (industry custom, including by Cisco); Tr. (Volpi) at 2033-41; *Wall Data*, 447 F.3d at 778. In fact, Cisco itself engaged in similar use when building its own CLI, deliberately copying useful features from TOPS-20 and other systems. *See* Tr. (Lougheed) at 589:24–593:9; 596:14–22; 598:7–599:24; 601:2-11; Tr. (Lougheed) at 582:23-583:3 (show command); Tr. (former Cisco engineer Li) at 1852:4-9, 1855:22-1857:14; TX 9073 (former Cisco engineer Satz Tr.) at 32:3-8, 42:8-12. Disinterested witnesses from Cisco competitors also testified that their companies would not have supported a Cisco-like CLI with hundreds of overlapping commands—the common industry practice—if they believed it was wrong. *See*, *e.g.*, TX 9081 (Cato Tr.) at 64:24-65:08; Tr. (Li) at 1863:13-24.

G. Cisco abandoned its copyrights as a matter of law.

The record here also compels a finding that Cisco abandoned its copyrights. Abandonment occurs where a copyright holder manifests its intent to surrender rights in a work through some overt act. *Hampton v. Paramount Pictures Corp.*, 279 F.2d 100, 104 (9th Cir. 1960); *Capitol*

Records, Inc. v. Naxos of Am., Inc., 372 F.3d 471, 483 (2d Cir. 2004). An express statement of an intent to abandon rights is not required, however; for example, the authorization of a wide circulation of copies without notice and a failure to prevent others from infringing are evidence of an intent to abandon. See Stuff v. E. C. Publications, Inc., 342 F.2d 143, 145 (2d Cir. 1965); Ninth Cir. Model Jury Instructions § 17.22.

The same evidence that proves Arista's fair use defense also proves that Cisco abandoned any copyright interest it ever had in the asserted CLI elements, by consistently demonstrating its intent to surrender any such rights. The trial record shows that Cisco believed that it had no copyright interest in its CLI commands and that it was good for Cisco for other competitors to use Cisco-like command-line interfaces, so Cisco promoted widespread industry use to its customers. Cisco knew for years before Arista that others in the industry were imitating Cisco's CLI and calling it the "industry standard," and acknowledged as early as 2003 that a 10-20% overlap of CLI commands was normal fair competition. Cisco never sued any else for using its CLI alone (without source code), though it studied Arista beginning in 2008—until it realized it could not succeed fairly against Arista's superior products, and then sued only Arista (for CLI use that Cisco continues to tolerate in the rest of the market). *See supra* Part II.D-F.

H. Cisco has misused its copyrights as a matter of law.

The same evidence that supports Arista's fair use and abandonment defenses, and Cisco's deficient proof on its own claim of copyright infringement, also proves Arista's defense of copyright misuse. *See Altera Corp. v. Clear Logic, Inc.*, 424 F.3d 1079, 1090 (9th Cir. 2005) (misuse defense bars enforcement of copyright during period of misuse). The misuse doctrine prevents "holders of copyrights from leveraging their limited monopoly to allow them control of areas outside the monopoly." *Apple Inc. v. Pystar Corp*, 658 F.3d 1150, 1157 (9th Cir. 2011) (quotation omitted). The only reasonable conclusion on this record is that Cisco doing exactly that: attempting to leverage limited copyright claims to stifle fair competition in broader markets (for switches and operating systems) where it has no copyright interests, abusing the copyright monopoly to seek broader anticompetitive power. *See supra* Part II.D-F. This is misuse.

I. No reasonable jury could fail to find merger on this record.

Copyrighted material is not protectable when its expression and idea "merge" because there are only a limited number of ways (or only one way) to express the idea. *Ets-Hokin v. Skyy Spirits, Inc.*, 225 F.3d 1068, 1082 (9th Cir. 2000); *Oracle I*, 750 F.3d at 1359 (citing *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 706–07 (2d Cir. 1992)). The Ninth Circuit has explained that, "[w]hen the 'idea' and its 'expression' are thus inseparable, copying the 'expression' will not be barred, since protecting the 'expression' in such circumstances would confer a monopoly of the 'idea' upon the copyright owner free of the conditions and limitations imposed by the patent law." *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 446 F.2d 738, 742 (9th Cir. 1971). Here, any potential expression in the asserted CLI elements merges with the functions and ideas being expressed and is not protectable. Even if a jury could find some creative expression (despite the other defects explained above), that expression was so highly constrained that any reasonable jury must find merger on this record.

IV. FOR THE SAME REASONS, ANY NEW TRIAL MUST INCLUDE ALL ISSUES

For all the same reasons explained above (incorporated here by reference), Arista is also entitled to a new trial on all of the issues discussed above if the current judgment is overturned and judgment is not granted to Arista as a matter of law. Arista asserts its conditional right to a new trial on these grounds solely to guard against any potential waiver of its rights if a new trial is ordered on Arista's successful *scenes a faire* defense. The jury's verdict against Arista on all of the issues addressed above is "contrary to the clear weight of the evidence." *See Silver Sage Partners, Ltd. v. City of Desert Hot Springs*, 251 F.3d 814, 819 (9th Cir. 2001). Any new trial ordered here must also include all of the issues set forth above: where "the issues are interwoven," a partial re-trial is improper and any new trial must be "as to all of the issues." *Lies v. Farrell Lines, Inc.*, 641 F.2d 765, 774 (9th Cir. 1981). As shown above, all of the issues here (including *scenes a faire*) are interwoven and depend on much of the same overlapping evidence, and a partial re-trial on an isolated issue would be unjust.

V. CONCLUSION

For all the reasons stated above, Arista is entitled to judgment as a matter of law.

	Case 5:14-cv-05344-BLF	Document 760 Filed 01/17/17 Page 33 of 33
1		Respectfully submitted,
2	Dated: January 17, 2017	KEKER & VAN NEST LLP
3		
4		By: /s/Robert A. Van Nest ROBERT A. VAN NEST
5		
6		Attorneys for Defendant ARISTA NETWORKS, INC.
7		
8		
9		
10		
11		
12		
13 14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
	ARISTA'S	26 S JMOL AND CONDITIONAL MOTION FOR NEW TRIAL
)3		Case No. 5:14-cv-05344-BLF (NC)

1135277.03